

TEACHER RESOURCES

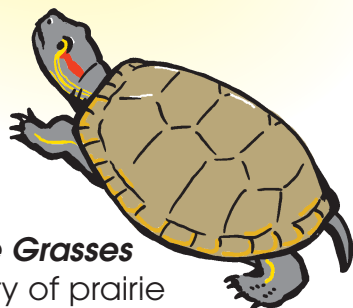
Missouri Owls poster depicts the eight owls found in Missouri.

Rivers and Streams: Missouri Currents poster features 19 plants and animals found along Missouri's rivers and streams, including predator-prey relationships.

Outdoors in Missouri-Summer poster emphasizes urban and park activities.

Missouri Pond Life poster features a variety of animals that depend on ponds.

Prairie: Life Among the Grasses poster depicts a variety of prairie wildlife and plants, including predator-prey relationships and describes 38 species. Also includes general information on Missouri prairies and an activity.



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The video *How Plants Get Food* shows how plants make their own food (photosynthesis) at a kindergarten to third grade level.

The *Secret of the Pond* depicts a group of youngsters discovering interesting and unusual life forms.

Discover *Life in the City Habitat*. This video shows how some creatures have adapted to survive in a habitat originally built for people.

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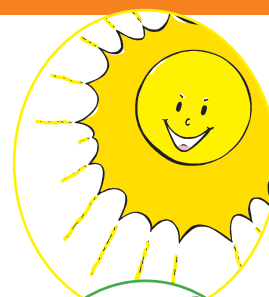
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Conservation TEACHER



Summertime! This issue of Conservation Teacher focuses on summer and plants and animals. Summer means fishing, hiking and lots of outdoor fun. Learn more about food chains and water wildlife. Have a great summer!

Earth Day is April 22.

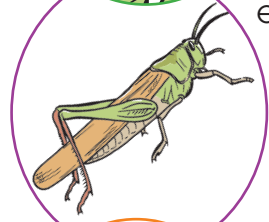


Munch TIME

Explain the term **food chain** to the class. Tell them that energy flows through the food chain.



All energy on earth comes from the sun. Plants absorb energy from the sun which helps the plants grow. Some animals then eat the plants and get energy or food from the plants.



Larger animals often eat smaller animals and the energy gets passed along, just the way we get energy from our food.



OWLS

Owls are night hunters. This makes it easier for them to hunt mice and other small animals that are active at night (**nocturnal**). Their **beaks** and **talons** make them excellent hunters. Talons or sharp claws on their feet are good for catching prey, and a hooked beak is like teeth to tear the meat apart.

Pizza PARTY

Where does pizza come from? Students should circle the source of each ingredient. On the pizza, have them draw their favorite topping and then, in the circle, draw a picture of where it comes from. Have students share and discuss their drawings.

Have the class pick another favorite food (i.e., hamburger with pickles, lettuce and cheese) and create a mural showing where the ingredients come from.



APPLICATION

Bonus activities for school or home

Students can draw pictures of the plants and animals they see outside. Then they can draw lines between the animals and what they eat.

Ask students to take a walk with a big person at night to listen for owls whooping. If they go to a park with trees or a woodlot, they should hear great-horned owls.

Insects have

Six

An **insect** is an animal characterized by three pairs of legs, three distinct body parts and often two pairs of wings.

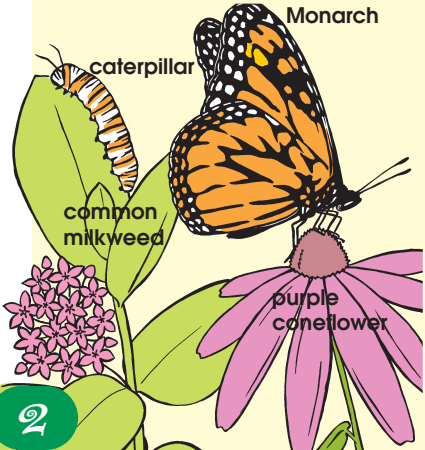
Have students circle the insects in the picture. Discuss the animals not circled and why they are not insects.

Spiders have 8 legs. They are called arachnids. Earthworms have no legs and are called annelids. Centipedes are chilopods and have one pair of legs per body segment.

MONARCH MATH

Monarch butterflies are one of the easiest insects to recognize. Their wings are orange-brown with black borders and veins. Their spots are mostly white.

Birds don't bother Monarchs. The caterpillar eats milkweed, which contains a milky, poisonous substance. The milkweed makes them taste bad.



The Viceroy butterfly is smaller, but is similar in color to the Monarch. By imitating the coloring and behavior of the Monarch, Viceroy's can fool birds into not eating them. This is called **mimicry**.

Prairies

Then and Now

Discuss life on the prairie long ago. How is it different now? Discuss things that are the same and different.

Prairies are land areas dominated by grasses and forbs (wildflowers). Prairies have some shrubs, but there are no trees. In the U.S., there are tallgrass prairies with tall grasses (like here in Missouri), mixed prairies with medium-height grasses and shortgrass prairies with shorter grasses.

ETHICS: Talk to students about enjoying wildflowers without picking or pulling them. You can smell the fragrance and look for insects and even sketch the flower. Wildflowers should be left for others to enjoy and are protected in most parks and wild areas. The plants need flowers to make seeds so new plants can grow.

APPLICATION

Bonus activities for school or home
Students can ask their parent to help them prepare this whacky mix for Butterfly Juice.
Ingredients: 1 can beer
2 lbs. dark brown sugar
2 cups molasses
2 lbs. ripe fruit

Mix and ferment in sun for 1 day. Dab some on a tree trunk or shallow pan several times per week. To store, keep in shade, loosely covered. Watch to see what kinds of butterflies come. Check it at night for moths, too. *(From BUGS! Nat'l Assn. for Interpretation, 32132 SR 2, New Carlisle, IN 46552)*

Students can repeat the My Bug Book activity at home. How do the kinds of bugs found at school compare to those found at home?

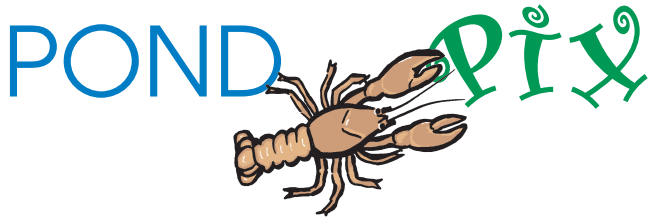
WORD - LINKS

What is the water hiding? Follow the stream to the lake and find out. The first and last letters of each word are given. The letter that ends one word begins the next word.



Students can find the missing words in the pond at the bottom of the page.

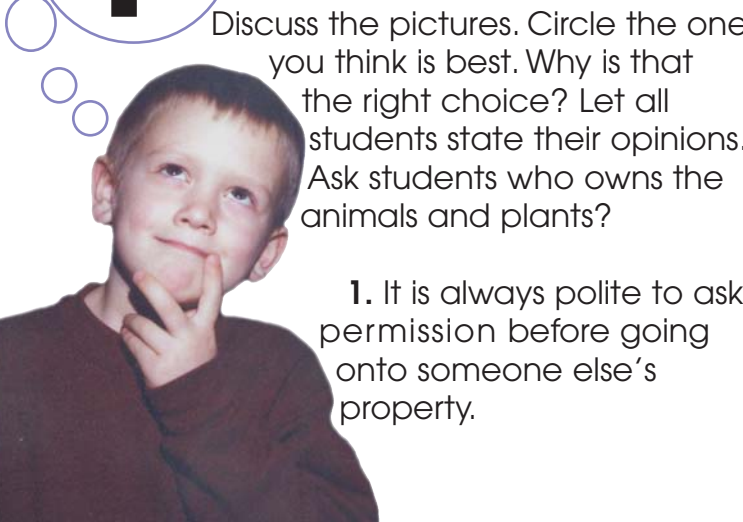
Ask students to create their own fishing word-links. Have a contest to see who can come up with the longest chain. This activity is harder than it seems.



Have students draw the plants and animals they want to live at their pond. Talk about the different animals and where they would be found (i.e., Would the raccoon stay in the middle of the pond?). Explain that all animals, like humans, need water.

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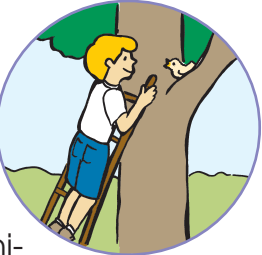
MAKING THE RIGHT CHOICE



Discuss the pictures. Circle the one you think is best. Why is that the right choice? Let all students state their opinions. Ask students who owns the animals and plants?

1. It is always polite to ask permission before going onto someone else's property.

2. Baby animals that are found may seem abandoned, but often they are being hidden by their mothers. It is best to leave young animals alone so their mothers can care for them. Although, an animal mother WILL usually accept her young even if they have been touched by humans.



3. Walking and hiking trails are made to help protect parks and wild areas. Walking outside the trail can hurt wildflowers and other plants and cause the soil to wash away. Staying on marked paths makes the area more enjoyable for everyone.

APPLICATION

Bonus activities for school or home
Students can go fishing with a parent or other adult. What animals did they see?
Students can share the Making the Right Choice activity with their parents. What other examples of making right decisions can they come up with?

Children's LITERATURE

- Little Red Hen*, by Byron Barton
- The Grouchy Ladybug*, by Eric Carle
- The Very Busy Spider*, by Eric Carle
- The Very Hungry Caterpillar*, by Eric Carle
- In the Pond*, by Ermanno Christini and Luigi Puricelli
- The Moon of the Owls*, by Jean Craighead George
- Wonders of the Pond*, by Francene Sabin
- Owl Moon*, by Jane Yolen
- It's a Good Thing There Are Insects*, by Allan Fowler

